Mattei Air Compressors Case Study

Client: APEC, a division of Helix Medical, Baldwin Park, California

Helix Medical, LLC is widely regarded as a premier supplier of biocompatible silicone medical devices and components to the medical device, pharmaceutical and biotech industries

Three AC-1 compressor units control all of the robotics in this medical device facility which runs 24/7. There is zero tolerance for air outvages so Compressors #1 and #2 are backed up with Compressor #3 for a fail safe guarantee. Compressor #1 has 49,000 hours and has been in operation for 10 years; Compressor #2 has 24,100 hours and has been in operation for 7 years; and the back up Compressor #3 has 32,900 hours and has been in operation for 5 years. None of the three Mattei AC-1 units have ever been in the LANS Company repair facility. “Whenever we have an issue 24/7 we can reach LANS Company by cell phone and we have immediate response. LANS keeps up with regular maintentance so we never have to worry.” - Lucio Ko

	Compressor #1	Compressor #2	Compressor #3
	49,000 Hours	24,100 Hours	32,900 Hours
15	10 Years in Operation	7 Years in Operation	5 Years in Operation

In the budget for the position of Compressor #1 is a Mattei Optima. The Optima will have many advantages for the APEC production facility:

OPTIMA: BEST SOLUTION TO SAVE ENERGY

To ensure maximum energy saving OPTIMA series compressors can suit their operation to the load profile required by the compressed air system. The inverter allows to the motor rotational speed to modify, adapting the air delivered by the compressor to the real demand. OPTIMA can save up to 35% of the annual operating costs.

OPERATING PRINCIPLE

Optima operates within a range of pre-set maximum and minimum pressures. When reaching the maximum pressure, at the minimum rotational speed the shutdown of the intake valve occurs, the compressor is set “off load” and decompressed to 1.5 bar, to reduce the energy absorption further. When the line pressure lowers to the minimum pre-set value it is reset to the “on load” condition and starts delivering air instantly, adapting the rotational speed to the air demand.